based may not precisely match the specifications used in developing the options in this volume. Furthermore, future estimates may be compared with baselines that are different from the one used for the estimates that follow in this volume.

What Is Not Included in These Options

For the most part, the options in this report are those in which savings would occur within the five-year window covered by the budget process. Other proposed actions, although they could certainly result in substantial deficit reduction, are beyond the scope of this report and therefore not included. Two of those proposals that have received considerable attention can serve as examples.

- o Redefining the role of the national government within the federal system could have wide-ranging, long-term impacts on federal, state, and local budgets. Ultimately, it could involve a wholesale reexamination of both revenue sources and functional responsibilities at all three levels. But such a plan would be extremely broad in scope and therefore could not easily be presented as a deficit reduction option in this volume.
- o Some fundamental changes in the financing of and structure of mandatory programs, including such options as increasing the retirement age for Social Security, were recently considered by the President's Bipartisan Commission on Entitlement and Tax Reform. Such options would also be difficult to present in this report.

Rethinking Federalism

Faced with a governmental system in which all three levels of government--federal, state, and local--are increasingly responsible for delivering services in the same policy areas (such as education, criminal justice, transportation, and health), some proposals have been advanced for a radical restructuring and clarification of the roles of the three levels of government.

Such proposals advocate a "sorting out" of responsibilities among the three levels. To illustrate, one proposal would divide responsibility by:

- o Giving the states responsibility for public investment to improve productivity in areas such as education and training and public infrastructure;
- Eliminating most federal programs in education, housing, highways, social services, economic development, and job training. Those functions would be carried out by lower levels of government; and
- o Giving the federal government sole responsibility for programs for health care, including adopting a plan that would ensure basic coverage for all citizens while controlling the growth in health care costs.³

A plan as ambitious as that one would clearly have broad implications for federal taxes, spending, and the deficit. Since it encompasses a wide range of options that are interrelated, however, no such proposal is included in this volume. It is excluded solely because of its scope and not because it is unworthy of consideration.

Reforming Entitlement Programs

The President's Bipartisan Commission on Entitlement and Tax Reform issued its final report to the President in late January. Although the commission was unable to agree on a comprehensive set of recommendations to reform federal entitlement programs, several of the commissioners did endorse specific ideas that would attempt to help solve the long-term entitlement problem.

Among the recommendations that would have a long-term effect on entitlement spending was one to increase the age at which a Social Security recipient would be eligible to receive full benefits. In particular, one proposal would raise that age from 67 to 70, phased in over a period of 30 years. In addition, the

^{3.} Alice Rivlin, Reviving the American Dream (Washington, D.C.: Brookings Institution, 1992), p. 17.

eligibility for Medicare would be gradually increased from age 65 to age 70. Both of those changes, though they could have a substantial effect on long-term deficits, would have the majority of their effects outside of the five-year estimating window used for this volume and therefore are not included. Those and other structural changes in major entitlements that would have long phase-in periods (such as changing the way in which benefits are calculated for

higher-income recipients or changing the calculation for cost-of-living allowances after the turn of the century) are not included because their major budgetary effects would occur beyond the five-year projection period.⁴

For a discussion of these and other options, see President's Bipartisan Commission on Entitlement and Tax Reform, *Final Report* (January 1995).

Defense and International Discretionary Spending

he collapse of the Soviet Union has presented both an opportunity and a challenge to policy arena. The opportunity has been to reduce the share of the nation's resources devoted to defense. Defense cuts were a major element of the deficit reduction packages passed by the Congress in 1990 and 1993. As a share of gross domestic product (GDP), defense outlays accounted for 5.9 percent in 1989. According to the Congressional Budget Office's (CBO's) projections, that share will be only 3.8 percent in 1995.

The challenge to policymakers has been to cope with the rising number of civil, ethnic, and tribal conflicts throughout the world. Since Operation Desert Storm ended, U.S. military forces have been deployed to Somalia and Haiti, have provided humanitarian assistance to the Kurdish people of northern Iraq and to refugees from Rwanda, and have participated in the North Atlantic Treaty Organization's support activities for the United Nations peacekeeping mission in Bosnia. Spending for the peacekeeping and humanitarian activities of the U.S. military and the United Nations (of which the United States pays nearly one-third) have represented significant, unbudgeted claims on the Departments of Defense and State.

This chapter presents options for reducing spending for national defense and international affairs (budget functions 050 and 150). Budget authority for national defense for 1995 totaled \$262 billion. The Department of Defense's (DoD's) military functions accounted for \$252 billion, or 96 percent; the remainder consisted primarily of nuclear weapons programs

administered by the Department of Energy (DOE), including cleanup of nuclear processing facilities. For international programs, the Congress appropriated \$20 billion in discretionary budget authority for 1995.

The National Defense Budget

National defense budget authority more than doubled in the early years of the Reagan Administration-from \$144 billion in 1980 to \$295 billion in 1985-then was held at roughly its 1985 level through 1990 before beginning to decline. But when inflation is taken into account, a different picture emerges. Over the past 10 years, real defense budget authority has dropped sharply, for a cumulative decline of 35 percent (see Figure 2-1).

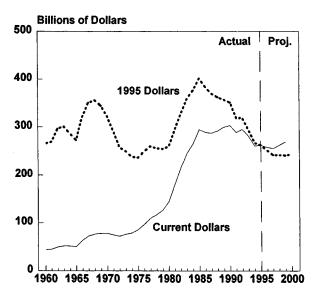
Reductions in the number of military and civilian personnel, the closing of bases, and the cancellation or deferral of many modernization programs largely account for that drop. But savings from eliminating forces have yet to be matched by proportionate decreases in costs for the Department of Defense's extensive infrastructure of bases, supply and repair depots, and other facilities.

Moreover, some parts of the defense budget have continued to grow, even as U.S. military forces have been reduced by one-third. For example, DoD's spending for environmental programs tripled between 1990 and 1994. The Congress has also increased spending on conversion programs to assist workers

and firms displaced by the defense drawdown. In addition, costs for peacekeeping and humanitarian missions have been paid out of operating funds otherwise available for training, thus raising concerns in the Congress that the pace of such activities is harming the military forces' readiness for traditional combat missions.

These and other concerns have led some Members to call for an increase in defense funding. But even if the Congress agrees, budget pressures will continue and may gain force if the balanced budget amendment is adopted (as discussed in Chapter 1). Some options presented in this chapter would reduce military forces or capabilities in specific areas; others would trim spending for support activities. Although this volume focuses on ways to reduce the federal deficit, the savings from these options could be applied in any number of ways. For example, the savings could fund additional spending for higher-priority military functions without increasing overall budgetary allocations for defense.

Figure 2-1.
Budget Authority for National Defense



SOURCE: Congressional Budget Office based on data from the Office of Management and Budget and the Department of Defense.

Assessing Threats to National Security

One aim of U.S. national security policy is to maintain military forces that are powerful enough to deter potential adversaries from attacking the United States directly or to defeat them, should deterrence fail. The collapse of the Soviet Union and the Warsaw Pact removed the single greatest military threat to the United States and its allies in Europe and the Pacific. The United States and the four nations of the former Soviet Union that retain nuclear weapons have ratified the first Strategic Arms Reduction Treaty (START I).

Since 1990, the United States has nearly halved its land-based intercontinental ballistic missile (ICBM) force, reduced the number of strategic bombers from 244 to 107 and taken them off alert status, and retired the last of its Poseidon class missile submarines, reducing the number of sea-based missiles from 584 to 360 (see Table 2-1). Although those are dramatic declines, the U.S. strategic triad of bombers, land-based ICBMs, and Trident submarines still provides a robust deterrent to direct nuclear attack. Some analysts feel that the greatest current threat from nuclear weapons and materials in the former Soviet Union is the likelihood that they could be diverted to other countries, where they might be used in regional conflicts.

Conventional military forces have also been reduced--by a third or more from their 1990 levels. For example, active Army divisions were cut from 18 to 12, Air Force tactical fighter wings (active and reserve) from 36 to 20, and Navy ships from 546 to 373 (see Table 2-1). Those forces are close to the targets set by the Clinton Administration in its Bottom-Up Review.

The Administration's new basis for sizing conventional forces is a scenario in which the United States could become involved in two major regional conflicts nearly simultaneously. Those conflicts would require U.S. forces to deploy abroad to meet a threat directed at a U.S. ally or at a country or countries where vital U.S. or international interests were deemed to be at stake. For planning purposes, the opposing forces in each of the two conflicts are as-

sumed to be on the order of those Iraq had during the Persian Gulf War.

The Administration, in its Bottom-Up Review, determined the forces it believes the United States would need to deploy to win both conflicts. Those

forces include 10 active Army divisions, supplemented by eight National Guard divisions and other reserve combat and support units. The Navy would have fewer ships than in 1995, but it would retain the 11 active carrier battle groups plus one reserve carrier for training and local contingencies.

Table 2-1.
U.S. Military Forces (By fiscal year)

	1990	1993	1995	Bottom-Up Review Plan ^a
Strategic Forces				
Land-based ICBMs	1,000	787	550	500
Strategic bombers	244	168	107	154
Sea-launched ballistic missiles	584	408	360	336
Land Forces				
Army active divisions	18	14	12	10
Army reserve component divisions	10	8	8	8
Marine Corps divisions ^b	4	4	4	4
Naval Forces				
Battle force ships	546	435	373	346
Aircraft carriers				
Active	15	13	11	11
Reserve	1	0	1	1
Navy carrier wings				
Active	13	11	10	10
Reserve	2	2	1	1
Air Forces				
Tactical fighter wings				
Active	24	16	13	13
Reserve	12	11	7	7
Airlift aircraft				
Intertheater	400	383	371	327
Intratheater	460	406	388	394

SOURCE: Congressional Budget Office using data from the Department of Defense. Data for 1990, 1993, and 1995 are from Office of the Secretary of Defense, Annual Report to the President and the Congress (January 1994). Data for the Bottom-Up Review are from the Fiscal Year 1996 Department of Defense Budget Briefing of the Under Secretary of Defense (Comptroller), February 6, 1995.

NOTE: ICBMs = intercontinental ballistic missiles.

a. The Bottom-Up Review did not provide goals for all types of forces. Estimates of strategic forces are based on the Nuclear Posture Review and airlift forces on the Air Mobility Master Plan, which were completed after the Bottom-Up Review.

b. Includes one reserve Marine Corps divison.

The Air Force's tactical aircraft forces would stay at about their current level.

But the Bottom-Up Review also described a need for improvements in some areas. To deploy forces to both theaters, the Secretary of Defense called for enhancing the strategic mobility forces, including Air Force airlift aircraft, Navy and Ready Reserve Force cargo ships, and prepositioning materiel abroad and at sea. The review also identified needed improvements in such areas as intelligence, communications, and command and control, as well as the procurement of advanced precision-guided munitions.

In 1994, U.S. forces were used in military missions that were very different from and smaller in scale than those in the Administration's planning scenario. For example, U.S. forces participated in the North Atlantic Treaty Organization's support of the United Nations' mission to Bosnia: Air Force and Navy pilots flew missions to enforce the no-fly zone, Navy ships participated in the blockade of military shipments to the warring parties, and Air Force airlift aircraft dropped relief packets of food and medicine. U.S. forces also delivered assistance to refugees who had fled the fighting in Rwanda.

Forces were also active in the Caribbean. Navy forces imposed a blockade on Haiti when its military rulers reneged on their agreement to transfer power to the elected government. Navy and Coast Guard units intercepted and detained Haitian and Cuban nationals seeking to enter the United States. In September, U.S. forces landed in Haiti to restore President Aristide and his government to power.

Force Structure

The Bottom-Up Review established goals for major elements of U.S. forces based on the scenario of fighting two major regional conflicts simultaneously. Some critics reject that scenario altogether, believing that the United States faces greater threats. Others accept the Administration's scenario but believe that the allotted forces are inadequate. Both camps argue against the cuts in forces the Administration is implementing as a result of the Bottom-Up Review. Some military leaders believe that although the reduced

forces would be adequate to meet the two-conflict threat, current limitations in airlift and sealift capacities would prevent DoD from deploying the forces in time to defeat a determined and aggressive adversary.

Other military analysts and policymakers believe that the two-conflict strategy overstates the likely magnitude of security risks the United States will face in coming years. They argue that further reductions in military forces are possible with little risk to national security. Also, current U.S. forces are overwhelmingly superior technically to those of any likely adversary. To accommodate those views, additional reductions in military forces are among the options presented in this chapter.

Readiness

Many Members of Congress believe that the rapid pace of peacekeeping operations in 1994 took a toll on military readiness. Emergency operations affect the military in a number of ways. First, units sent abroad on peacekeeping or humanitarian missions are not immediately available for combat elsewhere. Second, their deployment may interrupt or delay their scheduled training for combat, and once the units are deployed, their combat skills may atrophy because their situation does not permit training activities to be conducted. The third factor is a budget issue: military managers must dip into their operating accounts to finance the cost of contingency operations. That can lead to cuts in training for other units not involved in the operation. Supplemental appropriations to pay for the operation may arrive too late to rectify the situation. These specific issues notwithstanding, most of the measures of overall readiness for the services remain near their peak. None of the budget options presented here are directed at reducing readiness.

Modernization

Spending for the acquisition of weapon systems in recent budgets is down more than 50 percent from Cold War levels. The sharp cuts DoD made in its forces has enabled it to terminate or reduce procurement of most ships, planes, and fighting vehicles

without creating a shortage of equipment. But beginning around the end of this decade, DoD will have to resume purchasing many of those items. In the coming decade (2001-2010), CBO estimates that procurement spending will need to average as much as two-thirds more than its 1995 level. Several of the options presented below would either defer or cancel some of the programs responsible for that projected increase.

Although procurement has fallen sharply, DoD acquisition managers have followed a deliberate policy of maintaining a high level of research and development spending through 1994. That policy was seen as key to keeping the United States at the technological forefront for future weapons while production of earlier generations of weapons was coming to a close. But the Administration's budget projections for the rest of the decade suggest that research and development spending will decline considerably through 2000, even as procurement spending rises. That shift will return research and development spending almost to its historical relationship with procurement spending. Some of the options would affect development programs for new weapons. One (DEF-19) would reduce spending for dual-use technology programs.

Roles and Missions

The Congress, in the National Defense Authorization Act for Fiscal Year 1994, established a Commission on Roles and Missions of the Armed Forces. The commission's charter is to review all aspects of the organization of the Department of Defense for possible efficiencies and improvements. It will review such matters as duplication among the services in performing military missions, as well as the consolidation of support activities such as training, maintenance, and intelligence gathering. The commission's report is due in May 1995. Many of the options described in this chapter are drawn from previous CBO analyses of the issues related to the services' roles and missions and may be germane to the debate on this topic.

A Shortfall in the Defense Budget?

Cutting the defense budget has been a primary means of reducing the federal budget deficit. The 1990 deficit reduction package achieved one-third of its total \$500 billion reduction through cuts in future defense budgets. And defense cuts accounted for nearly 80 percent of the reductions in discretionary spending in the Administration's 1993 deficit reduction package.

Many Members of Congress now believe that cuts in the defense budget have been too precipitate. They question whether the Administration's planned forces can be adequately supported and modernized with the funds the Administration has allotted. CBO's own review of this issue found that the cost of the 1995-1999 Future Years Defense Program might exceed the Administration's planned defense budgets by \$65 billion, or about 5 percent of planned spending. In December 1994, the President announced his intention to increase future defense budgets by a total of \$25 billion through 2001. That action, together with the Administration's request for \$2.6 billion in supplemental funding to pay for contingency operations in 1995 and DoD's decision to defer or cancel certain weapons modernization programs, has reduced CBO's estimate of the potential mismatch to \$47 billion over the 1995-1999 period.1

This mismatch between programs and resources is yet another reason to seek efficiencies in the defense budget. Proponents of a stronger military may need to find ways to cut certain elements of DoD spending to finance the additional resources they would like to devote to higher-priority defense activities.

Specific Options for Reducing Defense Spending

The national defense budget the Congress approved for 1995 totals \$262 billion in budget authority and

For more details on this issue, see Congressional Budget Office, "An Analysis of the Administration's Future Years Defense Program for 1995 Through 1999," CBO Paper (January 1995).

\$270 billion in outlays (see Table 2-2). Of the \$262 billion in budget authority, \$252 billion is for military functions of the Department of Defense, \$10.3 billion for atomic energy defense programs and cleanup of nuclear facilities of the Department of Energy, and \$0.5 billion for defense activities of other departments and agencies of the federal government.

About \$166 billion--nearly two-thirds of DoD's budget--is used for operation and support of military forces. That amount includes \$70.4 billion in pay and allowances for military personnel, \$92.0 billion for operation and maintenance of the military forces, and \$3.4 billion for operating, maintaining, and improving family housing. The remaining third of the budget is for investment spending, including \$44.6 billion for procuring weapons and other items of equipment, \$35.4 billion for performing research and developing and testing new weapon systems, and \$5.5 billion for military construction (see Table 2-2).

Table 2-2.
Discretionary Appropriations for National Defense for Fiscal Year 1995 (In billions of dollars)

	Budget Authority	Outlays
Department of Defense		
Military personnel	70.4	70.6
Operation and maintenance	92.0	88.0
Procurement	44.6	54.7
Research, development, test,		
and evaluation	35.4	35.1
Military construction	5.5	5.6
Family housing	3.4	3.4
Other	0.3	<u>1.4</u>
Subtotal	251.6	258.8
Department of Energy		
Atomic Energy Programs	10.3	10.5
Other Agencies and		
Departments	0.5	0.7
Total	262.4	269.9

SOURCE: Congressional Budget Office.

The 66 percent of the budget that is used for current operations versus the 34 percent for investment is quite high by historical standards--in 1985 the split was 53 percent and 47 percent.

The specific options for achieving efficiencies in and reducing costs for defense programs are grouped according to topic. Options numbered DEF-01 through DEF-19 address changes in investment plans and force structure. Those options include possible reductions in strategic systems, Navy ships, tactical aircraft in the Navy and Air Force, and Army light divisions, as well as other issues related to modernization programs for all of the services.

Options for reducing spending for both military and civilian personnel and for activities that support military forces are presented in DEF-20 through DEF-34. Some of those options would reduce compensation; others would change personnel policies, funding for operation and maintenance, and medical care practices in the military. None of these options are targeted at reducing readiness: instead, they are oriented toward achieving efficiencies in the military infrastructure that supports combat forces.

The table at the beginning of each option displays the five-year savings it would generate in the federal budget. For some options involving significant numbers of military personnel, savings recorded in the DoD budget (budget function 050) would be larger than those in the federal budget because DoD military personnel costs include an accrual charge related to retirement costs. That charge is transferred to the DoD retirement account elsewhere in the budget. Savings from the DoD budget for those options are shown in Appendix A.

A reader may wish to combine several options into a package of deficit reduction measures. Care should be taken not to include options that are mutually exclusive or that may overlap, resulting in the double-counting of savings. Subject to that caution, the resulting effects on future deficits may be estimated as follows.

First, select a baseline from which to start. CBO has projected the baseline deficit under two assumptions regarding discretionary spending: one baseline assumes adjustments for inflation for discretionary

spending after 1995; the other assumes spending is frozen at the 1995 level. Those baselines, together with an illustrative path showing the amount of deficit reduction necessary to achieve a balanced budget by 2002, are shown in Table 1-3 in Chapter 1. CBO's estimates of savings for individual defense options may be applied to either baseline.

Second, decide whether to include the savings in the Administration's 1995 defense plan. Measured against the inflation-adjusted baseline, the 1995 plan generates five-year outlay savings of \$139 billion (see Table 2-3, which also shows annual savings). Readers selecting the adjusted baseline can subtract the annual savings from the deficits shown in Table 1-3. (By doing so, the reader implicitly accepts all of the policy actions of the Administration that are necessary to reduce real spending by \$139 billion.) From that new amount they can then subtract the additional savings yielded by the options they select from this and other chapters.

Measured against the baseline that freezes spending at the 1995 level, however, savings from the Administration's defense plan are much smaller--only \$20 billion over five years (see Table 2-3). The real

Table 2-3.
Alternative Budget Paths for National Defense (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	Total, 1996-2000
	СВ	O's Projections	for National D	efense		
1995 Funding Level						
Budget authority	263	263	263	263	263	1,315
Outlays	264	264	262	262	261	1,313
1995 Funding Level						
Adjusted for Inflation						
Budget authority	272	282	291	302	313	1,460
Outlays	270	278	285	295	304	1,432
	Administratio	n's Fiscal Year	1995 Plan (as o	of February 199	94)	
Budget Authority	256	252	259	266	272	1,305
Outlays	258	258	257	259	262	1,293
Saving	gs or Costs (-) As	sociated with th	e Administrati	on's Fiscal Yea	r 1995 Plan	
From the 1995 Funding Le	vel					
Budget authority	7	11	4	-3	-9	10
Outlays	6	7	5	3	-1	20
From the 1995 Funding Le	vel					
Adjusted for Inflation						
Budget authority	16	30	32	36	41	156
Outlays	12	20	28	36	42	139

SOURCE: Congressional Budget Office.

Table 2-4.
Discretionary Appropriations for International
Affairs for Fiscal Year 1995 (In billions of dollars)

	Budget Authority	Outlays
International Development and Humanitarian Assistance	8.7	8.5
International Security Assistance	5.7	6.5
Conduct of Foreign Affairs	4.1	4.4
Foreign Information and Exchange Activities International Financing Programs	1.4 0.5	1.5 0.4
Total	20.4	21.2

SOURCE: Congressional Budget Office.

reductions in defense discretionary spending reflected in the 1995 plan, as well as additional reductions in nondefense spending, are needed just to achieve the goal of holding overall discretionary spending at its 1995 level. Readers selecting the frozen baseline can subtract the \$20 billion in savings from the deficit projections in Table 1-3 before applying the additional savings that the selected options provide.

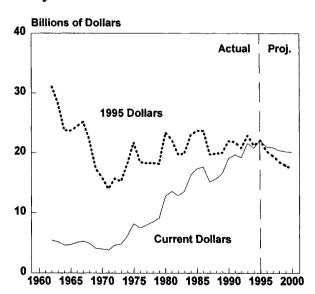
Of course, the Pentagon's plans change from year to year. For some of the options in this chapter, the Administration's new program for fiscal years 1996 through 2001 makes significant changes to the 1995 plan. Those changes may increase or reduce CBO's estimates of savings. Readers using the details of this volume to estimate savings relative to the Administration's fiscal year 1996 budget request for national defense should refer to the savings estimates shown in Appendix B for those options. (If an alternative estimate of savings has been made against the new budget request, a note to that effect appears in the option below the table.)

The International Affairs Budget

Spending for international affairs (budget function 150) is, compared with defense spending, a relatively small component of the total federal budget. The international affairs budget for fiscal year 1995 totals \$20.4 billion in discretionary budget authority and results in outlays of \$21.2 billion (see Table 2-4 for details of that budget function). Those outlays represent 1.4 percent of total federal government outlays and 3.9 percent of total discretionary outlays in 1995. Altogether, international programs consume 0.3 percent of the nation's gross domestic product.

In the past, the United States has spent a higher fraction of its budget and resources on international programs. In 1962, for instance, spending for international affairs totaled \$5.5 billion-equivalent to \$31 billion in today's dollars. That amount represented

Figure 2-2.
Outlays for International Affairs



SOURCE: Congressional Budget Office based on data from the Office of Management and Budget.

7.3 percent of total discretionary outlays and 1.0 percent of 1962 GDP. During most of the 1960s, spending for international affairs declined both absolutely and as a share of the budget, reaching a low of \$14 billion (in 1995 dollars) in 1971 (see Figure 2-2).

From that level, spending rose by two-thirds in the 1970s, reaching \$23.4 billion (1995 dollars) in 1980. Part of that increase reflected much greater levels of economic assistance for Egypt and Israel, agreed to as part of the Camp David Accords. Since 1980, real spending for international affairs has fluctuated within the range of \$20 billion to \$24 billion. In the 1990s, caps on the category of international spending and, since 1993, on total discretionary spending under the Budget Enforcement Act have tended to limit further growth in this budget function.

Options dealing with the international affairs budget are presented in DEF-35 through DEF-41. Those options cover a variety of topics, including bilateral development assistance and U.S. support to the multilateral development banks, activities of the State Department, exports of military equipment, sales and grants of food under the P.L. 480 program, and U.S. information programs abroad. Savings for each option are presented in two ways: against the 1995 level of funding for the program, and against the 1995 level of funding adjusted for inflation through 2000. Which standard to use depends on the baseline the reader chooses to start with, as discussed earlier in the defense section of this chapter.

DEF-01 REDUCE NUCLEAR DELIVERY SYSTEMS WITHIN OVERALL LIMITS OF START II

Savings from the	Annual Savings (Millions of dollars)					Cumulative Five-Year
1995 Plan	1996	1997	1998	1999	2000	Savings
Budget Authority	140	520	610	760	930	2,960
Outlays	-30ª	80	310	560	790	1,710

NOTES: This table includes estimated net savings in the federal budget. See Appendix A for estimated savings in the Department of Defense budget.

The Administration has made significant changes to its 1995 plan for these systems. See Appendix B for estimated savings compared with the Administration's fiscal year 1996 request.

a. Higher outlays from increased bomber operations more than offset savings from other cuts in 1996.

With the end of the Cold War, the nuclear superpowers have begun to scale back the size of their nuclear arsenals. If put into effect, the second Strategic Arms Reduction Treaty (START II), which was completed in 1993, will require that long-range nuclear forces be cut by roughly two-thirds of their 1990 levels by early in the next century. The United States and Russia have begun to plan their nuclear forces within the framework provided by both of the START accords; Ukraine's decision of November 1994 to sign the Nuclear Non-Proliferation Treaty should greatly help to implement both START treaties.

In its plan for fiscal year 1995, the Administration proposed to deploy a strategic force in 2003 with 500 Minuteman ICBMs (intercontinental ballistic missiles, each carrying a single warhead, although they can carry three), 47 B-52H bombers (each carrying 20 warheads), 20 B-2 bombers (each carrying 16 warheads), and 18 Trident submarines (each carrying 96 warheads). Overall, the United States would deploy almost 3,500 warheads--the maximum number allowed by START II.

The 1995 plan has been superseded, however, by the Pentagon's recent review of U.S. nuclear doctrine and forces (the Nuclear Posture Review). This review forms the basis of the Administration's plan for 1996. Like the old plan, the Administration's 1996 plan envisions a force of between 450 and 500 Minuteman ICBMs and 20 B-2 bombers. But the 1996

plan increases the B-52 force by 19 aircraft relative to the 1995 plan and reduces the Trident fleet by four submarines. Under the 1996 plan, the Administration will still deploy almost 3,500 warheads; the plan increases the number of warheads on each Trident missile from four to five and reduces the B-52H loadings to no more than 15 warheads.

This option would keep the same number of warheads that the Administration plans under START II, but it would load the warheads on fewer missiles and submarines and thus would retire some systems that the Administration proposes to retain in its 1996 plan. Under this option, the United States would retire four Trident submarines and 200 Minuteman III ICBMs relative to the 1996 plan (assuming that 500 ICBMs would have been deployed). It would preserve 300 Minuteman III ICBMs (carrying 300 warheads) and 10 Trident submarines, each loaded with 24 missiles. To offset the reduction in Trident missiles, the number of warheads deployed on the Trident force would stay at the level planned by the Administration (1,680) by increasing the number of warheads on each missile from five to seven. Like the Administration's plan for 1996, this option would retain 66 B-52H nuclear bombers, but each would carry 16 warheads for a total of 1,056 warheads. It would also keep 20 B-2 bombers, each loaded with 16 warheads--the same number planned by the Administration. Thus, the total strategic nuclear force proposed in this option would consist of almost 3,400 warheads--roughly 100 warheads fewer than the Administration proposes. Furthermore, no weapon system would be deployed with more warheads than it was designed to carry.

Compared with the 1995 plan, this option could save \$140 million in 1996 and nearly \$3 billion over the next five years. Those savings come from reduced operations and support (O&S) costs and lower levels of investment. The O&S savings reflect the retirement of the ICBMs, although those savings would be offset by the cost of operating more B-52 bombers than called for in the 1995 plan. Investment savings are achieved by canceling D5 missile production after buying 10 missiles in 1996 and extending the service life of fewer Minuteman missiles. Savings from operating four fewer Trident submarines are not reflected in the five-year savings because the submarines would not be retired until after 2000. (DEF-02 describes the savings from the Trident force in more detail.)

Savings would be greater relative to the Administration's 1996 plan because it calls for operating the same number of bombers as in this option, which is higher than called for in the 1995 plan. Also, the 1996 plan includes money that was not included in the 1995 plan to convert C4-capable Trident submarines so that they can carry D5 missiles. This option would cancel those conversions, saving an additional \$280 million in 1996 and \$4.3 billion over the next five years.

During the Cold War, this option might have raised concerns about stability. By putting more nuclear "eggs" in fewer baskets, the United States would have increased its vulnerability to a surprise attack. But today, with the most destabilizing nuclear modernization programs in the former Soviet Union terminated, fewer weapons at high states of readiness, and the end of the military competition

between the North Atlantic Treaty Organization and the Warsaw Pact in Europe, those concerns have become less acute. The United States may now decide that it can save money by deploying its warheads on fewer weapon systems.

This option would also preserve flexibility for future developments. For example, it would retain three types of nuclear systems (the so-called triad), despite the recommendations of some analysts that all ICBMs be retired in order to save money. Retaining all three types provides a margin of security against an adversary's developing a new technology that might render other legs of the nuclear triad more vulnerable to attack. In addition, although ICBMs are considered the most vulnerable portion of the triad, at least a fraction of them would be able to survive virtually any type of attack by any country, even if they had been taken off alert.

Against this option's advantages, the Congress would have to balance a number of disadvantages. Carrying more warheads on bombers and submarines would diminish the targeting flexibility of U.S. planners. Unilaterally reducing the ICBM and ballistic missile submarine forces would also reduce the ability of the United States to increase significantly the number of warheads it deployed in the event that Russia decided suddenly not to abide by START II. Indeed, some critics of this option and the Administration's 1995 plan argue that the United States should not relinquish any capability until Russia has fully complied with START I and ratified START II, because such a unilateral reduction would diminish U.S. leverage to persuade Russia to reduce its forces. Finally, by deploying fewer ICBMs, this option would reduce the forces that could be placed most easily in a nonalert but survivable status, an approach that some analysts have proposed recently to lower the chances of an accidental nuclear war.

DEF-02 TERMINATE PRODUCTION OF D5 MISSILES AFTER 1996

Savings from	Annual Savings (Millions of dollars)					Cumulative Five-Year
the 1995 Plan	1996	1997	1998	1999	2000	Savings
Budget Authority	80	420	390	420	370	1,680
Outlays	10	80	210	330	370	1,000

NOTE: The Administration has made significant changes to its 1995 plan for this program. See Appendix B for estimated savings compared with the Administration's fiscal year 1996 request.

The D5 missile, also called the Trident II missile, is the most accurate and powerful submarine-launched ballistic missile (SLBM) in the U.S. inventory. The result of more than 15 years of research and development, it is the keystone of the Navy's plan to modernize its ballistic missile force. Because of its accuracy and the size of its warheads, the D5 is the first submarine-launched missile that is capable of destroying very hard (or counterforce) targets such as missile silos and command bunkers. That capability will allow the Navy to assume some of the counterforce missions that previously could be carried out only by the Air Force's land-based intercontinental ballistic missiles and long-range bombers.

The Administration's 1995 plan would have deployed a force of 18 Trident submarines starting in 1998. Under that plan, the Navy would have procured a total of 389 D5 missiles and installed 24 of them on each of the 10 newest submarines. The eight older Trident submarines carry the older C4 missile, which is less accurate and has a shorter range than the D5. To support the 10 D5-capable submarines, the Navy has already purchased 337 D5 missiles and planned to buy 12 more in 1996 and a total of 52 through 2000. The C4 missiles are aging, however, and must be refurbished if they are to remain in the fleet. Alternatively, the Navy could modify (or backfit) the C4 submarines to carry D5 missiles. According to its 1995 plan, the Navy intended to wait a while before deciding which course to take. However, that plan did not include money for either option.

The Administration's 1996 plan, which reflects the results of the recent Nuclear Posture Review, assumes that the Navy will reduce the Trident force to 14 submarines by 2003, when the United States must fully implement the second Strategic Arms Reduction Treaty (START II). All 14 submarines will carry D5 missiles. To that end, the Navy will retire four of the C4-capable submarines by 2003 and convert the other four to carry D5 missiles. To support its 1996 plan, the Administration will procure six D5 missiles in 1996 and 91 more through 2005 for a total of 434 missiles. This new objective also reflects a decision by the Navy in the 1996 plan to reduce the number of D5 test flights to roughly four a year from the rate of six a year assumed in the 1995 plan. To keep the number of U.S. warheads near the ceiling allowed by START II, which limits the number of warheads on submarine-launched ballistic missiles to 1,750, the Administration will probably reduce the number of warheads per missile from eight to five (for a total of 1,680 warheads).

This option would terminate D5 production after buying 10 missiles in 1996 for a total of 347--the number that the Navy says it would need to support a 10-submarine force in light of its recent decision to reduce the number of D5 test flights. Accordingly, this option would deploy only 10 submarines equipped with D5 missiles and would eventually retire the eight C4 submarines. Like the Administration's 1996 plan, however, this option would not retire those submarines until after the turn of the century, both to encourage Russia's compliance with

START II and to retain the flexibility for the United States to remain at higher START I levels if Russia does not.

Relative to the 1995 plan, canceling D5 missile production after 1996 could save \$1.7 billion over the next five years. Savings relative to the 1996 plan would be about \$700 million higher because that plan calls for spending more on missiles over the next five years and starting the backfit of one C4 submarine in 2000. This option would create significant savings beyond 2000 relative to either plan because it would operate fewer submarines and avoid the cost of modifying C4 submarines and purchasing D5 missiles.

Several drawbacks are associated with terminating production of D5 missiles. Increasing the number of warheads per missile from five to seven would reduce the range of the missiles by roughly 20 percent. That would limit the areas of the ocean in which submarines could operate, thereby making the fleet more vulnerable. Furthermore, it would reduce the targeting flexibility of the force because missiles with fewer warheads can cover more widely dispersed targets. Also, requiring the Navy to deploy D5 missiles with seven warheads would constrain the United States' ability to increase sharply the size of its SLBM force by adding back the extra warheads if Russia broke out of START II, a central concern of some critics of this option. (See Congressional Budget Office, Rethinking the Trident Force, July 1993, for more details about the effects of this and other options for reducing the costs of the Trident force.) In addition, reducing the force from 14 to 10 submarines may increase its vulnerability to attack by Russia's antisubmarine forces. Critics also worry that terminating the production of the D5 missile early would leave the United States unable to produce new SLBMs without an expensive rebuilding program.

Nevertheless, terminating D5 production may be acceptable given the marked reduction in the chances of nuclear war between the superpowers. In that environment, the capability retained under this option for Trident submarines to destroy hardened targets, which exceeds the capability of today's fleet of ballistic missile submarines, may be judged sufficient to deter nuclear war. Although the range of the missiles and the size of submarine patrol areas would be smaller under this option than under the Administration's 1995 or 1996 plan, they would still exceed those planned during the Cold War when Russia's antisubmarine capability was greater and the United States intended to deploy the D5 with eight large warheads (W-88s).

The targeting flexibility given up by this option might not significantly reduce the ability of the SLBM force to deter nuclear war. It is not clear that the force of 1,680 warheads that the Administration plans to deploy on its Trident fleet under START II will deter an adversary more effectively if they are deployed on 336 missiles rather than on the 240 called for in this option. The diminished likelihood of nuclear war with Russia may also have weakened the rationale for the United States to deploy only five warheads on each D5 missile in order to retain its ability to increase U.S. nuclear forces rapidly. Moreover, the United States could increase the number of warheads on land-based ballistic missiles and bombers if Russia violated START II. Finally, supporters of this option would argue that the aerospace companies involved in refurbishing the Minuteman III and building boosters for space launchers will maintain enough skilled workers so that production of a new SLBM could be started in time to replace the missiles lost as Trident submarines begin to retire during the next century.